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OFF SANTA BARBARA:

California's Ranches in the Sea

BY EARL WARREN, JR.

*Illustrations by National Geographic
Photographer Bates Littlehales*

GULLS clamored in the wake and porpoises played in our bow wave as *Seeker*, her twin engines thundering, moved away from the California coast in the early morning.

"Full speed for the islands, skipper," said Reg Parton. "I can't wait to see Bates taking pictures of the hogs that charge trucks."

"And the sheep that can run 30 miles an hour," chimed in Pete Peterson from the wheel of the 38-foot cabin cruiser.

"How about the cave of the swimming lions?" I asked.

"And the mermaids with the brown eyes big as tennis balls," countered Bates Littlehales, National Geographic photographer. "You fellows have any more cock-and-bull stories for me this morning?"

"Sure," I said. "Prehistoric men may have barbecued midget elephants in the Santa Barbaras 30,000 years ago." But Bates had gone below to

Pacific swells wash rocky Anacapa and distant Santa Cruz

The Author

Earl Warren, Jr., has been interested in the Santa Barbara Islands since boyhood visits with his father, former Governor of California, now Chief Justice of the United States and a Life Trustee of the National Geographic Society. After graduation in animal husbandry from the University of California, the author studied these lonely islands in detail and wrote an authoritative treatise on the agriculture of Santa Cruz, largest of the group.

With their two small children and large black dog, a Labrador retriever, the Warrens live in Oakland, California. Mr. Warren, until recently a State agricultural officer, is now studying law.

sort out his cameras. We three chuckled. We had been to the Santa Barbaras before. Cock-and-bull stories? Bates was due for some surprises.

From Point Conception to Ventura the coast of California trends east and west. Within 30 miles of the mainland lie the four Santa Barbara Islands—Anacapa, part of a national monument; Santa Cruz and Santa Rosa, privately owned ranches; and San Miguel, an old ranch that is now a military rocket and bombing range (map, pages 260-61).

Islands Mapped 400 Years Ago

With four others they make up the Channel Islands of California. To the south and east lie the other four, one of them the famed tourist isle of Santa Catalina, known far and wide. But our concern this cruise was with the northern group.

A lot of people do not even know these islands exist. This is strange, for they have been on maps for 400 years and loom out of the blue ocean within sight of one of the most densely populated parts of the United States.

Present owners encourage the isolation. To visit any of the Santa Barbaras except in emergency, you must have a written landing permit, and you need good reasons to get it. Laws against trespassing are rigidly enforced. The ranching companies of Santa Rosa and Santa Cruz have told me why they are so exclusive.

"We used to welcome visitors," one cowman said, "but the price we paid was too high. Our worst trouble was with carelessly set fires. Some of the land burned over this way will

never produce grass again. Sometimes for meat, other times for no good reason, people killed our stock. They even took shots at our cowboys."

Obviously, the Navy can't have unheralded visitors on San Miguel. An erratic rocket might hit somebody. Quite as obviously, rifle plinkers aren't needed on Anacapa, where there is an important light and a complement of Coast Guard families to serve it.

We knifed across wind-swept Santa Barbara Channel with its swirling currents, our destination Santa Rosa. All necessary landing permits were stowed with the charts. Handling the boat was a blue-ribbon crew—tough, capable outdoorsmen Preston Peterson and Reg Parton, both motion picture stunt men.

Pete is a remarkable waterman. As swimmer, skin diver, water skier, surfer, and boatman he has few equals. Reg Parton falls off galloping horses expertly, but he can also handle an underwater fight scene.

Seeker, lavishly equipped for cruising, belongs to movie star Rory Calhoun. We had the use of her through Pete and Reg, for they and Rory are good friends. She started life as a Navy picket boat.

Bates, through previous assignments afloat, and I, from years of skin diving, at least knew enough about boats to keep out of the crew's way. This we did as Pete and Reg rounded up in Beechers Bay at Santa Rosa and dropped anchor off the long ranch pier (page 269). Bates, still half-seriously complaining about tall stories and what did we take him for, anyway, nevertheless consented to join us in the dinghy, and we rowed ashore.

Sheep and Hogs Run Wild

A brisk walk inland brought us to the ranch house, where three shaggy dogs noisily announced our arrival. Hayden Hunt, ranch foreman, quieted them.

"Howdy," he said. "Don't mind the dogs. Come in and have some coffee." While the pot was going the rounds, Hayden told us tales of the islands.

Wild sheep and hogs, he said, have roamed here for a very long while. According to tradition, early Spanish explorers, cruising the

Divers Pluck Spiny Lobsters from Rocky Lairs off Santa Cruz Island

Author Warren and three companions explored these volcanic crags while cruising among the seldom-visited Santa Barbara Islands. On the four lonely islets, only a few miles from the California mainland, they found extremes of verdant growth and desolation and a variety of unusual wildlife. Few people live there now, but Indian inhabitants roamed the islands for thousands of years.

Here at Santa Cruz, largest of the chain, the visitors turn lobster hunters. Rubber suits protect them from the chill water as they plunge to depths of 30 feet.





Mountaintops Jutting out of the Pacific Form California's Channel Islands; Only

California coast, left ancestors of these animals on the larger offshore islands as a possible food supply.

The sheep do indeed possess many of the best characteristics of old Spanish stock. Over the years, however, they have mixed with other strains brought to the islands. In most cases today the wild sheep and hogs are regarded as nuisances.

"On Santa Rosa we've eradicated almost all of them," said Hayden. "The hogs were big rangy fellows that looked like European wild boars. They tore down fences and rooted up hillsides. Then, after the rains, topsoil on the hill washed into the valley."

He admitted that hogs, when provoked, had occasionally attacked his cowboys.

"And trucks, too?" asked Bates.

"Didn't Earl tell you?" replied Hayden. "He has the mounted head of an old boar that kept charging a power wagon until he knocked himself out."

Bates mumbled something about a conspiracy and subsided.

A Sheep That Herds Dogs

The Vail & Vickers Company of Los Angeles owns Santa Rosa. It specializes in Hereford cattle, but runs a few Aberdeen Angus there as well. Except at roundup time, when extra hands come from the mainland, five cowboys, a cook, and Hayden Hunt operate the big ranch.

Until the turn of the century Santa Rosa was a sheep ranch, carrying as many as 80,000 head. Borrego, a ranch pet living a lazy barnyard life, is the last of them, except for a few wild strays on a remote part of the island. Several years ago cowboys found Borrego as a lost lamb.

The big wether's ears were tipped with brown, indicating North African blood that

was probably brought to Spain by the Moors. A fold, or "apron," across his chest showed kinship with Spanish Merinos. His face was black, showing the infusions of Hampshire or Suffolk blood introduced by ranchers in modern times.

"He sure gets his manners from the conquistadors," observed Reg. Borrego was pushing the three dogs around as though he were a haughty don and they were the poor Canaliño Indians the Spaniards found on these islands 400 years ago.

Grass to Delight a Rancher's Heart

In a converted military cross-country vehicle we struck out on a good dirt road through the range. Peaks towered 1,500 feet above lush green fields. Here and there lay bare arroyos, brushy ravines, and wooded canyons, but mostly there was grass on the land to delight a cattleman's heart.

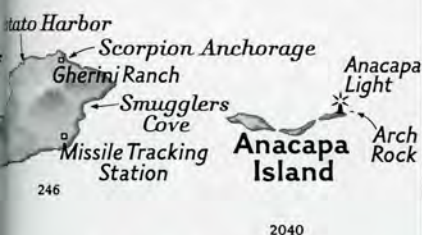
A tiny fox with big ears peered at us from tall grass beside the road. We stopped. The animal showed no sign of fear. At Hayden's suggestion Bates crouched behind a rock. The curious fox trotted over to see what was going on, and Bates had it in range to make its portrait (page 268).

"If you lie down, they'll come and sniff you, or maybe walk on you," said Hayden.

This was the celebrated island fox, a dwarf species of gray fox, one of several kinds of animal life that exist nowhere except on the strange Channel Islands. The others include a spotted skunk, a large white-footed mouse, and a friendly jay.

About the size of a large cat, the fox was bright orange and silver gray. I commented on its tiny muzzle.

"Maybe that's because he eats only grasshoppers and mice and other small things," said Hayden. "Mainland foxes have jaws



ISLANDS

Santa Catalina Welcomes Visitors

big enough to handle rabbits. There are no rabbits on Santa Rosa."

The scientific consensus, although not unanimous, is that the islands once were part of the mainland. The sea rose in this area long ago (page 266). The native animals would thus have started as mainland types but changed physically, as witness the fox, in the new island environment.

The fox finally decided it had seen enough of us and went on about the serious business of chasing grasshoppers.

"Ah, what a life," said Pete. "Chow everywhere, nobody to hurt him..."

Then, from the sky above, two black feathery missiles dove on the tiny fox and tumbled it end over end. Leaping to its feet, the fox stood on hind legs and held off a second attack with wildly waving forepaws. Before its attackers could regain altitude for a third dive, it ducked under an overhanging rock.

"Blasted ravens," growled Hayden. The American raven looks like an outsized crow but has a somewhat different voice.

We took to the truck again. Crossing a ravine we flushed a wild hog. It went charging off into a stand of cactus that would have stopped a horse. Bands of cattle bounced playfully in our wake, heads tossing in mock challenge. Horses, their chunky bodies and fine limbs showing good Morgan blood, seemed to be everywhere.

"We work hard here on the islands," said Hayden, "but give the horses long rests between working days. The system calls for plenty of mounts."

Radar Keeps 24-hour Watch

On a ridge we saw a big Air Force radar station. Here the 669th Aircraft Control and Warning Squadron keeps a 24-hour watch on the sky approaches to southern California,



checking every aircraft that comes into range.

Let an unidentified plane appear in the scopes, and instantly the duty men on Santa Rosa alert the nearest mainland-based fighter group to challenge the intruder. More than 200 men operate the station.

Archeologists were busy on the island; in the past decade the remains of 160 Indian villages have been discovered. The latest excavations were conducted by the Santa Barbara Museum of Natural History, the Western Speleological Institute, and the National Geographic Society.

Were Men Here 30,000 Years Ago?

"On Santa Rosa," said Phil C. Orr, director of the Speleological Institute and leader of the expedition, "we've found evidence to suggest that men barbecued a dwarf mammoth about 30,000 years ago. Radiocarbon tests on the charred bones gave us the figure."

"And a dwarf mammoth was a midget elephant, Bates," said Reg with a grin.

As day drew to a close, we turned onto high ground and headed back for the ranch. The cold island wind, mixed with fog, struck through our jackets and chilled us to the marrow. The Santa Barbaras are swept by perpetual damp breezes from the sea. Their





Herefords and Angus Tramp a Dusty Trail on Santa Rosa's Blue Sage Slopes

Thousands of cattle fatten on 17-mile-long Santa Rosa Island. Except at roundup time, a foreman, five cowboys, and a cook run the 53,000-acre ranch of the Vail & Vickers Company. Barges transport the stock to mainland markets.

Seaside slopes, too salty for grass, sustain only blue sage, but farther inland lush green ranges alternate with brushy ravines and wooded canyons.

Visitors need permits to land on Santa Rosa. Once they were welcome, but many came ashore with high-powered rifles. They killed cattle and sheep and even shot at the cowhands, and their fires burned out precious pastures.

Since 1946 archeologists have been digging on the island, seeking evidence that Early Man lived here during the last Ice Age.

Expeditions of the Santa Barbara Museum of Natural History, led by anthropologist Phil C. Orr, have uncovered the charred bones of dwarf mammoths. The six-foot-high creatures possibly were roasted by man in primitive barbecue pits. Radiocarbon tests have dated the bones at about 28,000 B. C.

Last year the National Geographic Society and the Western Speleological Institute joined the museum in sponsoring another major dig. So far more than 160 prehistoric village sites have been discovered, representing at least three distinct cultures of the past 7,000 years (page 266).

temperatures are neither very warm nor extremely cold.

Back at Beechers Bay the wind was kicking up a choppy sea. The dusk had an ominous feel. We moved *Seeker* close under the lee of the land and turned in. It fell calm during the night, and we woke to brilliant sunshine, snowy clouds, and sparkling water.

"This is the day for the cave of the lions," I said as we finished breakfast aboard our comfortable boat, whereupon Bates assumed his skeptical look again.

We took the anchor aboard and raced eight miles for our next island, Santa Cruz, under a canopy of gulls (page 278). Beneath 300-foot volcanic cliffs Pete kept *Seeker* circling while the rest of us loaded the dinghy with diving gear and made ready to hunt spiny lobsters. High on the jagged rocks perched sea birds—western gulls, California murres, and Baird's, Brandt's, and double-crested cormorants.

Down on ledges near the water, whence sometimes they took wing to escape breaking waves, sat comical little red-billed black oyster catchers and pigeon guillemots. Occasionally a stately bald eagle soared overhead in the sea wind.

In protective suits to keep warm, we swam 10 to 30 feet down into the chilly water at the base of the cliff. When we were lucky, we found lobsters peering from crevices, and we seized them with gloved hands before they could dart back into their lairs (page 259).

Divers Fish with Crowbars

Here, too, we introduced Bates to diving for abalone. The abalone is a shellfish that looks to the man under water like a piece of stone. It has a single oval shell worn turtle fashion over its back. Anchored by a strongly muscled foot, it lives on rocky submerged ledges and the sea bottom.

To feed on algae that grow on the rocks, it raises its shell half an inch. The trick in catching it is to slip a tire iron or small crowbar beneath the shell before the abalone can pull it down flush with the rock. Prying loose a buttoned-up abalone is quite a feat.

You eat only the foot of the creature. You trim the fleshy parts away, cut the tough muscle into thin slices, pound unmercifully until tender, then fry or broil (opposite).

I consider abalone one of the most delicious of seafoods. In Mexican and California waters, heavy fishing pressure is endangering

the supply. California in recent years has enacted legislation designed to conserve it.

We came to regret the stop, for kelp flies came aboard in thousands and competed for our lunch. The gangly half-inch insects cannot bite, but they are determined, bumblesome clingers; despite steady swatting we had them with us for three days.

The "cave of the lions" has a map name: Painted Cave. We easily spotted its 100-foot-high mouth among dozens of lesser grottoes on the Santa Cruz shore. The water within is deep; we took *Seeker* inside, as into a giant boathouse.

Sea Lions Roar Back at Intruders

For 50 yards we coasted on water so eerily clear we could see the weedless bottom three fathoms below. Small fish swam by, hanging above the clean rock as though suspended in air. Above us, in the soft light, green ferns grew upside down from the roof.

Where seas had splashed and mineral-laden water had seeped through the volcanic rock of the domed ceiling, blotches of soft greens, reds, and browns, and vivid streaks of yellow and white made the walls look like the palette of some Gargantuan painter. A deep stillness reigned; human voices died as though muffled in soft blankets.

We lowered the dinghy.

"Quiet, don't scare the lions," I whispered as we paddled deeper into the inky cave.

"Phooey," said Bates, and let out an unearthly yell.

Instantly ear-splitting roars and barks tore the quiet asunder. Huge bodies plunged unseen into the water, and we heard great wheezings as monstrous beasts rushed at us from the gloom.

Bates let out an unintelligible cry and fell down.

"Lions!" yelled Pete. "Look under the boat!"

Black bodies flashed beneath us, the currents of their passing whirling the skiff like a chip. At least a hundred surged by, rushing pell-mell out of the cave into the open sea. Finally all was still again, and we helped Bates up from the bottom of the dinghy.

"A whole herd of sea lions, and you didn't even open your camera," chided Pete.

Nobody seems to know exactly why the big animals like to congregate in the pitch darkness of Painted Cave, but you can almost always find a herd on the shelf at the back of

the grotto. I think they come in simply because it is quiet and sheltered. All too many passing boatmen, especially fishermen bent on eliminating competition, take shots at sea lions on open beaches.

From Painted Cave we set out for Prisoners Harbor, a Santa Cruz cove that takes its name from an experiment that failed. It seems that the Mexican Government, which owned the island in the early 1800's, sought a place to deposit certain "cutthroats, thieves, and the like."

These worthies were marooned on the island with a few provisions. They stayed as long as the supplies held out; then they built a raft and sailed back to the mainland.

We were going to Prisoners because it is the harbor for the Santa Cruz Island Company, whose ranch covers about nine-tenths of the 60,000-acre island. Largest of all California's Channel Islands, Santa Cruz has, I think, the most colorful past.

Even before California became a State, Santa Cruz was a famous sheep ranch. In 1865 a remarkable Frenchman named Justinian Caire first took over supervision of the ranch, then bought out the English company that employed him. He turned the island into a feudal estate along European lines.

Island Supported Pioneer Winery

Except for a few mainlanders imported during rush seasons, Caire's workers were French and Italian laborers fresh from Europe. Fine artisans, they made bricks, tools, and almost everything else that was needed.

Hand-wrought iron balconies attest to their skill at the forge. Substantial houses, barns, bunkhouses, a chapel, and other buildings they made are still in use, with plumbing and electricity added.

Caire planted grapes and made wines that long enjoyed wide popularity; he was one of the earliest successful wine makers of California, so famed today for its fine vintages. His sheep interbred with the descendants of the old Spanish flocks.

Caire died in 1898, leaving the ranch to heirs. In 1937 businessman Edwin L. Stanton of Los Angeles bought control of the company. The transaction gave him some 54,000 acres;

Slicing and Pounding, Seagoing Chefs Prepare Abalone for Supper

This shellfish of California waters is a prize delicacy. Its powerful muscle clamps so tightly to submerged rocks that a crowbar is needed to pry it loose. Any diver whose fingers get caught between shell and rock is in for a struggle.

Aboard *Seeker*, Earl Warren, Jr., trims an abalone's "foot"; Preston Peterson tenderizes another with a mallet. The mollusk's shell makes buttons and jewelry.





Pipe and Skull in Santa Barbara Museum Recall Vanished Santa Rosa Cultures

The Dune Dwellers, says Museum Curator Phil Orr, were an ancient people who lived atop huge mounds of shell and wind-blown sand. They buried their dead in a sitting position, adorned with red abalone shells and steatite pipes (left). Carbon 14 dates some of the shells as 7,000 years old. A recovered Dune Dweller skull (below) is still crowned with part of a bead headdress.

Less is known about the Highlanders, who built their villages on high, inland terraces, well away from the Dune Dwellers' sites.

Canaliño Indians took up residence on Santa Rosa some 2,000 to 4,000 years ago. Expert fishermen and canoe builders, they dwelt in hemispherical houses of thatched sea grass. Their descendants were still on Santa Rosa as late as the 19th century.



Plaster model shows how a rising sea has changed Santa Rosa's shoreline during the past 40,000 years. At each new level the battering waves carved a shelf farther inland. Once the sea level was 350 feet lower than now, and the four Santa Barbara Islands were linked together. Only a two-mile passage separated them from the mainland.

This model is being prepared for display at the Santa Barbara Museum of Natural History.

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the Gherini family, related to Caire, kept the remaining 6,000.

Mr. Stanton is a family friend of long standing. My father, when he was Governor of California, frequently visited Santa Cruz. Despite our ties, Mr. Stanton only reluctantly consented to let me write about his ranch, for more than any other of the Santa Barbaras, Santa Cruz with its inviting harbors has suffered from the depredations of water-borne vandals.

The morning after our arrival in Prisoners Harbor we were able to return Mr. Stanton's favor. His company's sturdy old converted schooner *Santa Cruz*, which hauls livestock to the mainland, parted her mooring line with nobody aboard.

When we saw what was happening, she was half a mile away and drifting fast for the rocky shore at the other end of the harbor. With *Seeker's* engines at full throttle, we took up the pursuit. We caught the *Santa Cruz* with only minutes to spare. Pete jumped aboard with a line, made fast to the schooner's windlass, and shouted at us to snub.

But *Seeker* had no towing bitts, and when the strain came, an inadequate cleat started pulling out of the afterdeck. Quickly we belayed to another and tried again.

The cleat held. Slowly, painfully, the schooner came head to wind. The *Santa Cruz* was heavy. It took us nearly an hour to get her safely back to the pier.

Old Signs Teach Table Manners

Leaving Pete to do a few chores on the boat, Bates, Reg, and I drove the three miles to ranch headquarters in a pickup truck. Headquarters lies in a fertile valley, an idyllic, isolated place out of sight and sound of the sea (page 275).

In one of the old Caire buildings we sat in a dining room where the foreign sheepherders of the old regime used to eat. Signs in Italian still hung on the walls.

"Caire must have tried to teach good table manners to his people," grinned John Imhoff, cattle foreman. "This sign here, for example, says the dogs should not be fed at table. And that one warns against annoying your neighbor while he eats."

For the benefit of Reg and Bates, Imhoff told us something of the island's history.

"When Mr. Stanton took over," he said, "he decided at first to stay in the sheep business. Trouble was the animals were scattered all

over the place and so wild you almost had to shoot them to catch them.

"So we bought 10,000 nice tame sheep and turned them loose, figuring they'd calm their wild friends down. It worked out the other way—the tame sheep went wild."

The decision was made to switch to cattle, he went on. The first thing to do was to get rid of an unknown but large number of sheep that could climb like goats, jump like deer, and run like the wind.

Wild Sheep Caught by the Thousands

"How fast would you say those sheep could run?" Bates put in.

"Well, the boys have clocked them at better than 30 miles an hour. Of course, they can't keep it up all day."

Bates took on a surprised look.

"I'm almost ready to apologize," he told Reg and me, "but I think I'll wait until I see that mermaid with the tennis-ball eyes."

"Sorry," said Imhoff. "We've never tried to wrangle anything like that. It's hard enough work to catch sheep. But we did round up 35,000 the first few years and sell them off to the mainland."

"We thought we had the problem solved; so we put in our cattle, the purebred Herefords you saw on your way from the harbor. But in 10 years the sheep were coming back strong and ruining the grass."

"In 1955 we built a series of huge wing traps, fences that funnel down to a corral a mountain goat couldn't jump out of. In three more years we caught 24,000 sheep—about a million and a half pounds of meat. Eventually we'll clean the rest of them out."

Imhoff took us on a quick jeep tour. He pointed out fields overrun with cactus, result of past overgrazing by sheep. Now and again we saw them in little flocks grazing on steep hillsides or in inaccessible canyons. As soon as they saw the jeep, they bounded away.

Like Santa Rosa, Santa Cruz has a government station. Perched on a ridge some distance from the ranch buildings, this Navy facility helps track the guided missiles shot from Point Mugu on the mainland. Some 30 people man it.

On the way back to the boat we saw large coveys of valley quail, the State bird of California.

"We imported Chinese ringneck pheasants," said Imhoff. "They did fine the first few years, but we don't see them much any more."





Rolling Green Hills Shelter the Crescent of Beechers Bay

Sea mists, borne on chilling winds, produce magnificent pastures on Santa Rosa. The Channel Islands often stay green even when California's mainland experiences dry spells. *Seeker*, the cruiser that carried the author through the islands, lies at anchor off the pier.

Santa Rosa fox, big eared and small jawed, is one of half a dozen creatures that exist only on the island chain. Scarcely larger than a house cat and almost as tame, the dwarf hunts mice and insects for his fare.

Santa Cruz jay, unusually fearless, feeds on pine seeds.

Kodachrome (above) and Anscochromes by National Geographic Photographer Bates Littlehales © N.G.S.



Maybe the skunks, foxes, and ravens break up their nests."

Bates spotted a Santa Cruz jay, similar to the California scrub jay, but listed by ornithologists as a subspecies unique to this one island. The bird exhibited only mild interest as Bates took its picture (page 269).

"He'd eat off your plate if you camped here a few days," Imhoff commented.

Ravens Attack Ewe and Lamb

Imhoff drove us to the pier. As we were about to get into the dinghy, Bates turned to the foreman.

"Tell me," he said, "are there birds on these islands that kill lambs? These fellows have been kidding me so much I hardly know what to believe."

"You bet there are. Some are flying over your head this minute." He pointed to ravens wheeling above. "One of those will kill a newly dropped lamb in jig time, and may peck out the weak mother's eyes, too."

Ravens look mischievous, but not murderous. Killing out of hunger is natural enough, but the thought was chilling. These islands are often beautiful, but a note of the sinister attaches to them as well.

We headed *Seeker* eastward, and at dusk nosed into Potato Harbor, another Santa Cruz cove, this one a long, fingerlike depression. I thought it an ideal anchorage. Pete and Reg, however, were restless, walking around the boat nervous as cats, peering back at the cove entrance, and listening to the rumble of surf breaking on the cliffs outside.

Suddenly, without words, Reg brought the anchor in and Pete started the engines.

"What's the trouble?" I wanted to know.

"With a swell like this Potato can close up before you can get out," said Pete. "Seas break right across the entrance. We'll run to Scorpion. That's Gherini's harbor anyway."

Santa Cruz Shears Prize Wool

In the morning we landed at the pier that serves the Gherini ranch. Whereas Stanton switched to cattle, the Gherinis have stuck with sheep. They have modernized with new blood, but their flocks, like the tame Borrego at Santa Rosa, still show the old Spanish characteristics. We saw rams carrying spectacular four-foot-wide horns with more than two complete curls.

The annual roundup had begun, and shearing was in progress (pages 272-3). We

watched a wool buyer from the mainland as he inspected the animals.

"What wool!" he exclaimed. "There's not another clip like this in California and possibly not in the United States. See that ram in the corner of the pen? I'll bet his fleece will go 20 pounds, as fine almost as cashmere."

We climbed a hill to watch two Gherini brothers, Pier and Francis, bringing sheep in from the range. On horseback the Gherinis moved a skittish flock along a steep, rocky hillside, herding them inexorably toward a fence that would press them into a series of field-sized traps.

Sometimes when animals tried to double back, a thrown rock was enough to turn them, but once in a while it took a rifle bullet thumping into the ground ahead of them to do the trick. The only sound was the bleating of the sheep and the occasional crack of the rifle. The drive moved at a slow pace.

"I should think they'd yell and whoop and scare 'em in fast," said Bates.

"If they did," said the wool buyer, "you'd see half the sheep shoot back through the horsemen, even going under the horses' bellies. The other half would pour over these fences like birds. You've never seen these island sheep jump!"

Sheep Clear a High Hurdle

A moment later we did. A ewe and her two lambs, smarter or wilder than the rest, sailed over a five-foot fence with ease and vanished over a ridge.

"There go three more!" laughed Pier Gherini, reining up his horse. "We lost maybe 400 before we even got to the wire. But we brought in a couple of thousand."

Francis Gherini took us into the next valley to the south, a sun-dappled spot reminiscent of the Italian Riviera. Groves of olive trees, blue-green leaves shimmering, covered the hillsides. Full-crowned walnuts and fruit trees shaded the valley floor to the long, curving beach of Smugglers Cove.

At ranch headquarters Francis showed us the brothers' little Indian museum, a shed filled with projectile points, bone fishhooks, stone pipes, and the like. Most of these things had belonged to prehistoric tribes, but some were relics of the more recent Canaliño Indians who once thickly populated the Channel Islands.

The first account of the Canaliños came from Juan Rodríguez Cabrillo, a Portuguese



Proud Descendant of Conquistador Flocks, Borrego Enjoys a Pet's Life

Early Spanish explorers presumably introduced sheep to the Santa Barbaras as a food supply. For many years their progeny roamed both Santa Rosa and Santa Cruz amid ranchers' flocks.

Today on Santa Rosa cattle have taken over, and sheep are considered a nuisance. Except for a few wild strays, the lone survivor is this ranch pet. Cowboys who found him as a lamb gave him the name Borrego, a Spanish colloquialism for "simpleton."

explorer in Spanish pay, who landed on the islands in 1542 during the voyage that discovered California for Europeans. He described a friendly island folk who "are very poor. They are fishermen; they eat nothing but fish; they sleep on the ground; all their business and employment is to fish."

Canaliños Fade into Extinction

As more and more white men visited the islands, European diseases took a heavy toll of the natives. Russian otter hunters cruised these waters, dropping off savage warriors from the Aleutian Islands to trade with the Canaliños and hunt otters until the Russians returned. These visitors—and Anglo-Saxon hunters also, sad to say—killed many island Indians in fights over their women.

Finally the Franciscan missions took the survivors to the mainland, and there they lost their identity among the coastal tribes. No pure Canaliño exists today.

Next day we sped to Anacapa with a rollicking breeze at our backs. This island is a weather-beaten spine of rock jutting out of the Pacific only 13 miles from the mainland. Actually it is three islands, for there are two breaks through which the sea rushes at high tide (pages 256-7).

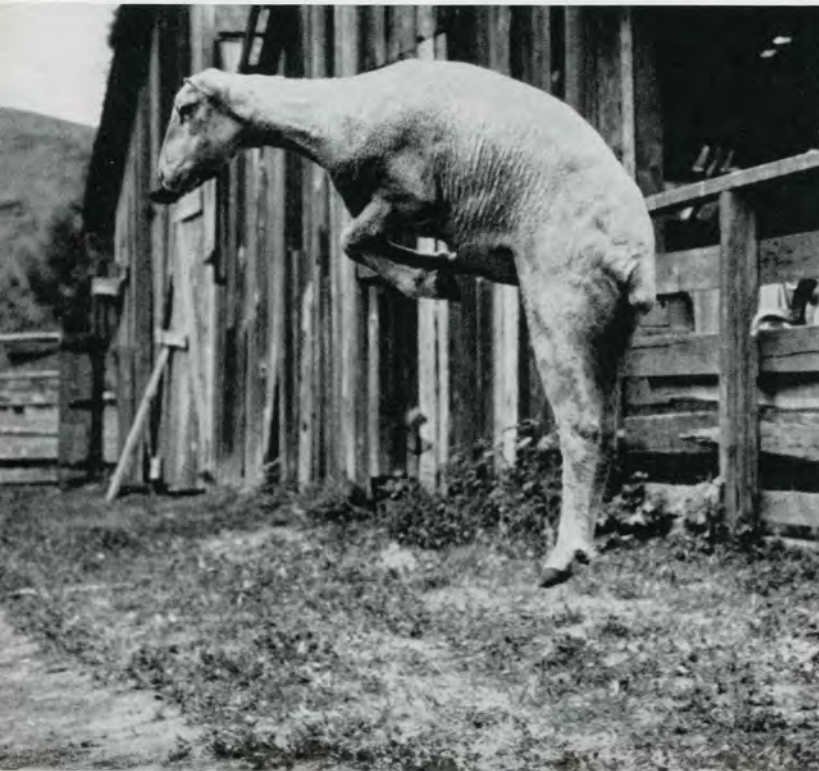
With Santa Barbara Island, 42 miles to the southeast, it forms Channel Islands National Monument. Here the National Park Service, in a rare departure from usual policy, looks askance at visitors, preferring to reserve the area as a haven for seals, sea birds, and possibly sea otters, which are making a comeback along the California coast.

Although Anacapa has no fresh water, it was once a sheep ranch of sorts. An old story tells how the flocks may have survived there: After heavy night fogs soaked their wool, each morning the animals munched the dew from one another's coats!

Below the light on Anacapa's eastern seg-

Santa Cruz Sheep Jump Like Deer and Outsprint Horses

While Santa Rosa has worked to get rid of its sheep, on Santa Cruz the Gherini ranch still runs flocks of thousands. Breeding has modernized the bloodline, but Spanish Merino characteristics still predominate. Tightly curled ram's horns measure up to four feet, tip to tip.



Excited ewes, stripped of their thick coats, bound from the corral.

Because of the agility of Santa Cruz sheep, roundup requires skillful herding. The skittish animals dart up and down rocky hillsides to elude the traps. The author watched a ewe and two lambs easily clear a five-foot fence.

A big ram may yield as much as 20 pounds of high-grade wool almost as fine as cashmere. A shearer with electric clippers can complete the fleecing in three minutes.



ment we steered *Seeker* carefully into a cleft in the rock that passes for a harbor. A wharf has been somehow glued to the lava cliff, but the lighthouse crew never leaves its boat long in the water for fear the swells will smash it against the rocks. Instead, a big crane lifts the craft onto one of several concrete platforms (page 277).

We climbed a dizzying staircase to the top of the cliff. Engineman 1st Class John Freie led us to four white stucco houses in a brilliant sea of flame-flowered ice plant, introduced to keep the dust down and make the bleak place a bit more attractive (page 276).

"Home, sweet home," said Freie. "Three families each have a house; five bachelors live in the fourth.

"Home—and sometimes an Alcatraz. When seas are rough, we may be stranded here for two weeks. But in emergency a helicopter can land on our concrete water catchment."

"What do you do to keep from getting bored?" we asked our Coast Guard host.

"You'd be surprised," replied Freie. "We hike, go out fishing, skin dive, and look for Indian sites. The women do as they do anywhere—they phone each other. Actually, they need only to lean out their windows to talk, because our houses are so close together."

Rabbits Took Too Well to Anacapa

A fence surrounds the dwellings. Freie told us it keeps the children from wandering to the cliff's edge and the rabbits from getting into the family flower beds. Rabbits were introduced here a few years ago to see how they'd fare, and they have done much too well. The big black and mottled-white animals would eat the island bare if not thinned out from time to time.

We visited 600,000-candlepower Anacapa Light. In the radio building technicians were

compiling weather data for transmission to the mainland every three hours.

As we walked around, foolishly I volunteered to go out onto a high, thin ridge of rock on the tip of the island for a picture. Freie looked dubious but said nothing. I went about 50 feet and looked down. It was a straight 250 feet to the sea on either side of my perch, a bit of rock only 18 inches wide!

In a sudden panic I sat down—and chunks cracked from both sides of my eyrie and fell silently into the void. I remembered something I had read: "Anacapa is an old crumbling ridge steadily tumbling into the sea."

"But not with me on it," I decided. "This is learning geology the hard way."

Summoning up courage, I inched backward until I could turn around, and then shakily rejoined my companions.

"I didn't make a picture," said Bates. "You didn't give me enough action."

Returning to the radio room, we tuned in on the weather report our hosts had helped assemble. The nearest storm was 1,000 miles north, we learned. This gave us a perfect chance to run for San Miguel 55 miles due west, the forbidding, uninhabited isle we planned to make our last port of call in the Santa Barbaras.

San Miguel: Island of Ghosts

It was dark when we reached San Miguel. We anchored in Cuyler Harbor and let the long Pacific swell lull us to sleep. In the morning we pulled ashore, landing on a beach of dazzling sand unmarked by a human footprint. Despite the bright sun we were cold.

Pete put our thoughts into words.

"Brrr," he said. "This place is dead."

What at first we took to be waterfalls leaping from steep hills turned out to be cascades of sand, the very substance of the island, slipping away into the sea. We made our way inland, climbing steadily. Sliding dunes made the going difficult (page 282).

We came onto flat ground at the top, and all around us was barren, dusty desolation, except for a green patch around the ranch buildings where the destroying sheep had not been allowed to graze. Dust devils danced

with the everlasting wind from the Pacific.

As we reached the ranch compound, a hollow booming sound startled us, but it was only the doors of a weathered barn banging in the wind. A crumbling ram's horn, a horseshoe, and a rusted plow lay on the ground.

Ruined Ranch Hints of Tragedy

Spirits sinking with every step, we explored an outbuilding where harness hung on hooks, each labeled with a horse's name. Fleeces lay on a skirting table, awaiting a trimmer who would never appear. A crimson geranium grew beside the long, narrow ranch house; once it had brightened a woman's existence in this lonely spot.

Now we went into the house, and there lay furniture all wrecked by vandals. A marble-topped table had been wantonly smashed. Window frames were ripped out.

"Look at this," said Reg quietly.

He stood in a child's bedroom. There was a crib, a small bed, and a playpen awaiting a tiny tenant; even vandals have hearts. When I saw a set of children's blocks lying as they had fallen when a little girl sent her make-believe house tumbling, I could stand no more. I left, and my friends came with me.

The story of San Miguel is a tragic one. Once a man and his wife lived here with their two small daughters, tending the island sheep. It was a lonely life without neighbors, but the family was together, and they were happy at first. Authorities on the mainland sent schoolbooks. The mother held classes for her children.

Then one terrible day the father took his own life. The mother and little girls went back to the mainland, too heartbroken even to pick up a set of tumbled blocks. In time the Navy came. Although it practiced bombing here some years back, the ranch buildings were spared.

We slid down the dunes, dispelling gloom with violent physical exercise. We boarded *Seeker* and ran at full throttle around the island, until we came to a wind-lashed peninsula where huge animals lay basking on the sand like so many giant sea slugs. "At least

(Continued on page 283)

Switzerland or Pacific Isle? Hills of Santa Cruz Hide an Idyllic Vale

Ranch headquarters of the Santa Cruz Island Company sprawl along this fertile valley, shielded from sight and sound of the sea by steep brush hills. Red roofs identify main living quarters; gleaming tin covers the old winery (extreme left) and the T-shaped equipment building. European artisans built the barns and ranch houses in the 19th century.





A blanket of ice plants helps keep down the dust on windy Anacapa, where the U. S. Coast Guard maintains a light. The mainland is only 13 miles away.

Author Warren rides atop the cabin as *Seeker* cruises past Arch Rock off Anacapa's eastern tip. Thousands of California brown pelicans nest on the natural bridge.

Power crane hoists a small boat from a cliff-girt bight on Anacapa's sheer coast. Passengers must climb zigzagging iron steps to reach the Coast Guard station. Anacapa and Santa Barbara Island, its tiny neighbor to the southeast, make up the Channel Islands National Monument.









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Santa Barbara Channel. Wheeling and Dipping, They Dive for Scraps from the Galley



Cornered, a bull roars in protest and threatens with gaping mouth. The author easily dodged its clumsy lunges.

The sea elephant's big canine teeth can inflict an ugly wound. On an earlier visit to San Miguel, Mr. Warren's companion stepped too close to a cow and had his hand and wrist caught by viselike jaws. The victim finally beat off the animal with feet and free fist, but not before suffering a severe mangling.

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Sea Elephants, Homeliest of Sun Bathers, Bask on the White Sands of San Miguel

Mirounga, largest of seals, may stretch 20 feet and weigh more than 5,000 pounds. Carrying a thick layer of blubber beneath its rough hide, the gross creature quivers like gelatin as it shuffles along on land.

A monstrous snout distinguishes the male. Relaxed, the hollow proboscis droops several inches below the mouth. But when the bull barks, the appendage swells with air. It serves no known useful purpose.

Herds of thousands once inhabited the California coastal islands, but commercial sealers nearly exterminated the species. Protected now, the beasts have staged a remarkable comeback in the past 50 years.

Like a pile of fat sausages, sluggish sea elephants mass together in a tangled heap. Fighting and mating cries fill the air. Stains and scars blemish the leathery hides.

In August males come ashore on uninhabited San Miguel to select their harems. In late winter and spring the cows give birth to single black pups.

Huge brown eyes have an appealing quality, reports the author. He dubbed the females "mermaids with tennis-ball eyes."

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something is alive around here," we said, and rowed ashore. Bedlam broke loose as the dinghy grated on the strand. Sea lions, roaring their annoyance at the intrusion, arched their necks and skip-hopped for the water with surprising agility.

But the sea elephants, the elephant seals we had come to see, merely moved nervously, as measuring worms move, and waited to see what would happen.

Once-rare Sea Elephants Make a Comeback

Their presence here, and elsewhere along the California coast, marks a milestone on a heart-warming comeback trail. Once whalers hunted these huge creatures almost to extinction, boiling down their carcasses for oil. Now they are growing numerous again. Their invasion of the sea lions' old hauling-out beaches on San Miguel is quite recent.

Bates focused his camera on a bevy of cows. Then he leaped into the air with a whoop.

"The mermaids!" he shouted. "The mermaids with the big brown tennis-ball eyes! Oh, you jokers!"

He was dancing around so much we had to shout a warning.

"Watch it! Step back into the jaws of one of those beauties and you'll lose a foot."

We moved closer. The sea elephants were friendly enough until we came within a few feet of them. Then they hissed, showed their savage teeth, and sometimes made short lunging charges.

Oddly, the big bulls were the friendliest. One of them, however, did get a bit vexed with me. I got between him and the water, whereupon he inflated his monstrous proboscis and came lumbering for me. I do not know whether he would have bitten me, but he surely would have run me down, and since he weighed perhaps two tons, I stepped quickly and politely to one side.

The elephant seal gets its name from the



A cross on lonely San Miguel honors the discoverer of the Santa Barbaras, Juan Rodríguez Cabrillo, a Portuguese navigator who sailed under the Spanish flag. Many believe Cabrillo died on the island, but his burial place remains a mystery. The memorial follows the Portuguese spelling of his name.

proboscis, an adornment of the bull only (page 280). When he is excited, the male inflates this leathery appendage. Then he deflates it suddenly, with disagreeable belching sounds.

After we had been around awhile, the seals decided we meant them no harm, and some of them went to sleep. They were sound sleepers.

"Hello, dear," said Bates, shaking flippers with a bulky mermaid. "I love you." She never stirred.

Reg, Hollywood stunt rider, speculatively eyed a somnolent bull.

"I wonder..." he began.

But we seized him and led him away, and we all went back to *Seeker* the way we had come, in the dinghy.

Glaciers of Sand Cascade Down the Windy Cliffs of San Miguel

Rolling dunes and desolate cliffs overlook one of the few sheltered boat anchorages on this uninhabited island. Ruins of a pier recall a time when San Miguel harbored a prosperous sheep ranch. Today the deserted wastes serve as a tri-service bombing range.